

SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30				1. REQUISITION NUMBER 91110 50063593		PAGE 1 OF 25			
2. CONTRACT NO.		3. AWARD/EFFECTIVE DATE		4. ORDER NUMBER		5. SOLICITATION NUMBER N65540-05-Q-0139		6. SOLICITATION ISSUE DATE 05-FEB-23	
7. FOR SOLICITATION INFORMATION CALL:		a. NAME LINDA STIEMKE		b. TELEPHONE NUMBER (No Collect Calls) 215-897-1355 215-897-7059 (FAX)		8. OFFER DUE DATE/LOCAL TIME 05-MAR-17/ 0400 PM			
9. ISSUED BY CONTRACTING OFFICER NSWC CARDEROCK DIVISION 5001 S. BROAD STREET PHILADELPHIA PA 19112-1403 ATTN: LINDA STIEMKE 215-897-1355				CODE N65540 10. THIS ACQUISITION IS <input checked="" type="checkbox"/> UNRESTRICTED <input type="checkbox"/> SET ASIDE: % FOR <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> SMALL DISADV. BUSINESS <input type="checkbox"/> 8(A) SIC: SIZE STANDARD:		11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input checked="" type="checkbox"/> SEE SCHEDULE <input type="checkbox"/> 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) 13b. RATING 14. METHOD OF SOLICITATION <input checked="" type="checkbox"/> RFQ <input type="checkbox"/> IFB <input type="checkbox"/> RFP		12. DISCOUNT TERMS	
15. DELIVER TO RECEIVING OFFICER NSWC CARDEROCK DIVISION 1601 LANGLEY AVENUE PHILADELPHIA PA 19112-5051 ATTN: NAVAL BUSINESS CENTER				CODE N65540 16. ADMINISTERED BY		CODE N65540			
17a. CONTRACTOR/OFFEROR CODE FACILITY CODE				18a. PAYMENT WILL BE MADE BY CODE					
TELEPHONE NO. - -				18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED <input checked="" type="checkbox"/> SEE ADDENDUM					
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER									
19. ITEM NO.		20. SCHEDULE OF SUPPLIES/SERVICES			21. QUANTITY	22. UNIT	23. UNIT PRICE		24. AMOUNT
0001		REQ. NO. 91110 /50063593 HYDRAULICALLY FITTED COUPLING BOLT SYTEM FOR THE DRIVE END ADAPTER INTERFACE, IN ACCORANCE WITH THE ATTACHED PURCHASE SPECIFICATION (Attach Additional Sheets as Necessary)			12	EA			
25. ACCOUNTING AND APPROPRIATION DATA							26. TOTAL AWARD AMOUNT (For Govt. Use Only)		
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4, FAR 52.212-3, AND 52.212-5 ARE ATTACHED. ADDENDA							<input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED.		
<input type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA							<input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED.		
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN _____ COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.					29. AWARD OF CONTRACT: REFERENCE OFFER DATED _____ YOUR OFFER ON SOLICITATION (BLOCK 5). INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:				
30a. SIGNATURE OF OFFEROR/CONTRACTOR					31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)				
30b. NAME AND TITLE OF SIGNER (TYPE OR PRINT)			30c. DATE SIGNED		31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT)			31c. DATE SIGNED	
32a. QUANTITY IN COLUMN 21 HAS BEEN					33. SHIP NUMBER		34. VOUCHER NUMBER		35. AMOUNT VERIFIED CORRECT FOR
<input type="checkbox"/> RECEIVED <input type="checkbox"/> INSPECTED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED					<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL				
32b. SIGNATURE OF AUTHORIZED GOVT. REPRESENTATIVE			32c. DATE		36. PAYMENT				37. CHECK NUMBER
					<input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL				
					38. S/R ACCOUNT NUMBER		39. S/R VOUCHER NUMBER		40. PAID BY
					42a. RECEIVED BY (Print)				
41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT									
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER			41c. DATE		42b. RECEIVED AT (Location)				
					42c. DATE REC'D (YY/MM/DD)				42d. TOTAL CONTAINERS

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 2 OF 25

VENDOR:

SECTION B SUPPLIES/SERVICES

ITEM	SUPPLIES/SERVICES	QUANTITY UI	U-PRICE	AMOUNT
0002	REQN. NO. 91110 /50063596 DRIVE END ADAPTER INTERFACE SPARE, IN ACCORDANCE WITH THE ATTACHED PURCHASE SPECIFICATION	2 EA		
0003	REQN. NO. 91110 /50063597 HYDRAULICALLY FITTED COUPLING BOLT SYSTEM FOR THE DRIVEN END ADAPTER INTERFACE, IN ACCORDANCE WITH THE ATTACHED PURCHASE SPECIFICATION	12 EA		
0004	REQN. NO. 91110 /50063598 DRIVEN END ADAPTER INTERACE SPARE, IN ACCORDANCE WITH THE ATTACHED PURCHASE SPECIFICATION	2 EA		
0005	REQN. NO. 91110 /50063600 SPECIAL TOOLS AND MATERIALS REQUIRED FOR THE COUPLING BOLT SYSTEM INSTALLATION, REMOVAL, AND MAINTENANCE, IN ACCORDANCE WITH THE ATTACHED PURCHASE SPECIFICATION	1 LT		
0006	REQN. NO. 91110 /50063601 FIELD INSTALLATION SERVICES TO INSTALL THE BOLT SYSTEMS, IN ACCORDANCE WITH THE ATTACHED PURCHASE SPECIFICATION	1 LT		
0007	REQN. NO. 91110 /50144403 TECHNICAL DATA, IN ACCORDANCE WITH THE ATTACHED PURCHASE SPECIFICATION	1 LT		

This Request for Quotations (RFQ) covers the establishment of a firm-fixed price purchase order for the furnishing and installation of IPS Coupling Bolt Systems. All items shall be in accordance with the requirements set forth in the Purchase Specification for PMM-to-AIM Coupling Bolt Systems dated 26 January 2005 and Figure's 1 and 2. This RFQ is issued using Simplified Acquisition Procedures pursuant to the Test Program for Certain Commercial Items as authorized by Subpart 13.5 of the Federal Acquisition Regulation (FAR).

The Government intends to make a single award for all items to the low price technically acceptable offeror. Technical acceptability shall be determined based on an assessment that the Coupling Bolt Systems to be furnished comply with the specification requirements. In order to evaluate technical acceptability, offerors are required to submit the following information as part of their quotation.

1. **Technical Compliance:** In this factor, offerors shall provide a preliminary drawing of the bolting system it intends to furnish and any other information that demonstrates an understanding of the IPS Bolting System Specification and that the bolting system will comply with the requirements set forth in the IPS Bolting System Specification. In particular, the offeror must provide the following information:
 - 1.1 A preliminary assembly drawing demonstrating that the offeror understands the technical requirement of the technical specification. At a minimum, this drawing shall show include dimensions, tolerances, space requirements for in-place machining and space requirements for installation and removal, as well as maintenance of the bolted joints.
 - 1.2 Preliminary stress analysis of the bolted joints and design criteria used for selection.
 - 1.2.1 A preliminary design analysis shall be provided to support the proposed selection of the coupling bolting system and associated hardware.
 - 1.2.2 The preliminary design and mounting configuration of each coupling end interface must be considered for the analysis, including the bolt pattern geometry on each interface flange and the size of pre-machined bolt holes.
 - 1.2.3 A preliminary bolt stress analysis shall be performed based on the maximum continuous torque transmitted in ahead and astern operation of the coupling. The combined resultant stress in the bolted joint must not exceed the allowable design stress of the most loaded member in the bolted joint

- 1.2.4 The preliminary design torque capacity of the bolt system on each coupling end bolted interface must be capable of withstanding the maximum transient torque limit of the coupling shear section without yielding in the bolted joint. A minimum safety margin of at least 1.5 must be provided in resisting the overload torque regardless of design and type bolted joints selected for each coupling end flange interface. The combined resultant stress shall not exceed the yield strength of the most loaded member in the bolted joint.
 - 1.2.5 The preliminary analysis shall be performed based on the maximum compressive stress in the coupling bolt holes during normal operation, overload condition and when the hydraulic pressure is applied for the bolted joints installation/removal. Calculated stress in the coupling bores must not exceed the allowable bearing stress of the flange material.
 - 1.3 A preliminary list of materials and their mechanical properties for each proposed fastener (i.e. bolt, nut and washer).
 - 1.4 Preliminary procedures for in-place machining and installation/preload of the bolt system on each coupling end interface. This shall include the major preparation steps and dimensional requirements for the line-boring machine/fixture mounting, the criteria for conformance between finish machined coupling bores and match-ground tapered sleeves, the maximum duration time for on-site machining and installation services and the guaranteed accuracy of the bolted joints pre-load.
 - 1.5 A QA plan that conforms to the best commercial practices and industry standards that exist for the manufacturing of this product and which addresses the detailed requirements of the IPS Coupling Bolt purchase specification.
2. **Corporate Experience:** In this factor, offerors shall provide information on their experience in the design, fabrication, and successful installation of bolting systems that has been successfully used for similar service requirements at other installations. Offerors shall also furnish information on their manufacturing facilities, equipment, quality assurance/control system and other resources that demonstrate they possess the necessary capability to furnish the required IPS Coupling Bolt system.

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 5 OF 25

Failure to submit adequate information will result in a quotation being rated as Unacceptable. The Government intends on making an award based on the initial quotations received in response to this RFQ. Therefore, an offeror's initial quotation should contain its best offer from both a price and a technical standpoint.

All items will be delivered on a F.O.B. Destination basis (that is, inclusive of all delivery, shipping and transportation costs) to the destination specified in this FRQ. Quotations submitted on other than an F.O.B. destination basis will be determined to be nonresponsive and will not be considered for award.

52.212-4 CONTRACT TERMS AND CONDITIONS--COMMERCIAL ITEMS
(OCT 2003)

(a) Inspection/Acceptance. The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. The Government must exercise its post-acceptance rights--(1) Within a reasonable time after the defect was discovered or should have been discovered; and (2) Before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) Assignment. The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727). However, when a third party makes payment (e.g., use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) Changes. Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) Disputes. This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) Definitions. The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) Excusable delays. The Contractor shall be liable for

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 6 OF 25

VENDOR:

default unless nonperformance is caused by an occurrence Beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) Invoice. (1) The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized,) to the address designated in the contract to receive invoices. An invoice must include--

- (i) Name and address of the Contractor;
- (ii) Invoice date and number;
- (iii) Contract number, contract line item number and, if applicable, the order number;
- (iv) Description, quantity, unit of measure, unit price and extended price of the items delivered;
- (v) Shipping number and date of shipment including the bill of lading number and weight of shipment if shipped on Government bill of lading;
- (vi) Terms of any discount for prompt payment offered;
- (vii) Name and address of official to whom payment is to be sent;
- (viii) Name, title, and phone number of person to notify in event of defective invoice; and
- (ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision, contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer Other Than Central Contractor Registration), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(2) Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) prompt payment regulations at 5 CFR part 1315.

(h) Patent indemnity. The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) Payment. (1) Items accepted. Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract.

(2) Prompt payment. The Government will make payment in

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 7 OF 25

VENDOR:

accordance with the Prompt Payment Act (31 U.S.C. 3903) and prompt payment regulations at 5 CFR part 1315.

(3) Electronic Funds Transfer (EFT). If the Government makes payment by EFT, see 52.212-5(b) for the appropriate EFT clause.

(4) Discount. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(5) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

(j) Risk of loss. Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) Taxes. The contract price includes all applicable Federal, State, and local taxes and duties.

(l) Termination for the Government's convenience. The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) Termination for cause. The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) Title. Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) Warranty. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 8 OF 25

VENDOR:

the particular purpose described in this contract.

(p) Limitation of liability. Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) Other compliances. The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) Compliance with laws unique to Government contracts. The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. 327, et seq., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.

(s) Order of precedence. Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order:

- (1) The schedule of supplies/services.
- (2) The Assignments, Disputes, Payments, Invoice, Other Compliances, and Compliance with Laws Unique to Government Contracts paragraphs of this clause.
- (3) The clause at 52.212-5.
- (4) Addenda to this solicitation or contract, including any license agreements for computer software.
- (5) Solicitation provisions if this is a solicitation.
- (6) Other paragraphs of this clause.
- (7) The Standard Form 1449.
- (8) Other documents, exhibits, and attachments.
- (9) The specification.

(t) Central Contractor Registration (CCR). (1) Unless exempted by an addendum to this contract, the Contractor is responsible during performance and through final payment of any contract for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(2)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in FAR subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the CCR database; (B) comply with the requirements of subpart 42.12; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (t)(2)(i) of this clause, or fails to perform the agreement at paragraph (t)(2)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 9 OF 25

VENDOR:

other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(3) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(4) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at <http://www.ccr.gov> or by calling 1-888-227-2423 or 269-961-5757.

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (JAN 2005)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(2) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78)

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: [Contracting Officer check as appropriate.]

___ (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (JUL 1995), with Alternate I (OCT 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).

___ (2) 52.219-3, Notice of Total HUBZone Set-Aside (JAN 1999) (15 U.S.C. 657a).

___ (3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JAN 1999) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

___ (4) (i) 52.219-5, Very Small Business Set-Aside (JUNE 2003) (Pub. L. 103-403, section 304, Small Business Reauthorization and Amendments Act of 1994).

___ (ii) Alternate I (MAR 1999) of 52.219-5.

___ (iii) Alternate II (JUNE 2003) of 52.219-5.

___ (5) (i) 52.219-6, Notice of Total Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

___ (ii) Alternate I (OCT 1995) of 52.219-6.

___ (iii) Alternate II (MAR 2004) of 52.219-6.

___ (6) (i) 52.219-7, Notice of Partial Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

___ (ii) Alternate I (OCT 1995) of 52.219-7.

___ (iii) Alternate II (MAR 2004) of 52.219-7.

___ (7) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637 (d) (2) and (3)).

___ (8) (i) 52.219-9, Small Business Subcontracting Plan (JAN 2002) (15 U.S.C. 637(d)(4)).

___ (ii) Alternate I (OCT 2001) of 52.219-9.

___ (iii) Alternate II (OCT 2001) of 52.219-9.

___ (9) 52.219-14, Limitations on Subcontracting (DEC 1996) (15 U.S.C. 637(a)(14)).

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 10 OF 25

VENDOR:

- ___ (10) (i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (JUNE 2003) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).
- ___ (ii) Alternate I (JUNE 2003) of 52.219-23.
- ___ (11) 52.219-25, Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting (OCT 1999) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
- ___ (12) 52.219-26, Small Disadvantaged Business Participation Program--Incentive Subcontracting (OCT 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
- ___ (13) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (MAY 2004)
- ✓ (14) 52.222-3, Convict Labor (JUNE 2003) (E.O. 11755).
- ✓ (15) 52.222-19, Child Labor--Cooperation with Authorities and Remedies (JUN 2004) (E.O. 13126).
- ✓ (16) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).
- ✓ (17) 52.222-26, Equal Opportunity (APR 2002) (E.O. 11246).
- ✓ (18) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212).
- ✓ (19) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).
- ✓ (20) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212).
- ✓ (21) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).
- ___ (22) (i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (AUG 2000) (42 U.S.C. 6962(c)(3)(A)(ii)).
- ___ (ii) Alternate I (AUG 2000) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)).
- ___ (23) 52.225-1, Buy American Act--Supplies (JUNE 2003) (41 U.S.C. 10a-10d).
- ___ (24) (i) 52.225-3, Buy American Act--Free Trade Agreements--Israeli Trade Act (Jan 2005) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub. L. 108-77, 108-78, 108-286).
- ___ (ii) Alternate I (JAN 2004) of 52.225-3.
- ___ (iii) Alternate II (JAN 2004) of 52.225-3.
- ___ (25) 52.225-5, Trade Agreements (Jan 2005) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).
- ___ (26) 52.225-13, Restrictions on Certain Foreign Purchases (DEC 2003) (E.o.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).
- ___ (27) 52.225-15, Sanctioned European Union Country End Products (FEB 2000) (E.O. 12849).
- ___ (28) 52.225-16, Sanctioned European Union Country Services (FEB 2000) (E.O. 12849).
- ___ (29) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).
- ___ (30) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).
- ✓ (31) 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration (OCT 2003) (31 U.S.C. 3332).
- ___ (32) 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration (MAY 1999)

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 11 OF 25

VENDOR:

- (33) (31 U.S.C. 3332).
- (33) 52.232-36, Payment by Third Party (MAY 1999) (31 U.S.C. 3332).
- (34) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).
- (35) (i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (APR 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631).
- (ii) Alternate I (APR 2003) of 52.247-64.
- (c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: [Contracting Officer check as appropriate.]
 - (1) 52.222-41, Service Contract Act of 1965, as Amended (MAY 1989) (41 U.S.C. 351, et seq.).
 - (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
 - (3) 52.222-43, Fair Labor Standards Act and Service Contract Act--Price Adjustment (Multiple Year and Option Contracts) (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
 - (4) 52.222-44, Fair Labor Standards Act and Service Contract Act--Price Adjustment (February 2002) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
 - (5) 52.222-47, SCA Minimum Wages and Fringe Benefits Applicable to Successor Contract Pursuant to PreDecemberessor Contractor Collective Bargaining Agreements (CBA) (May 1989) (41 U.S.C. 351, et seq.).
- (d) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records--Negotiation.
 - (1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.
 - (2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.
 - (3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.
 - (e) (1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 12 OF 25

VENDOR:

is not required to flow down any FAR clause, other than those in paragraphs (i) through (vi) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause--

(i) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$500,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (April 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (December 2001) (38 U.S.C. 4212).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).

(vi) 52.222-41, Service Contract Act of 1965, as Amended (May 1989), flow down required for all subcontracts subject to the Service Contract Act of 1965 (41 U.S.C. 351, et seq.).

(vii) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (April 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor May include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

252.212-7001 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS APPLICABLE TO DEFENSE ACQUISITIONS OF COMMERCIAL ITEMS (JAN 2005)

(a) The contractor agrees to comply with the following Federal Acquisition Regulation (FAR) clause which, if checked, is included in this contract by reference to implement a provision of law applicable to acquisitions of commercial items or components.

☒ 52.203-3 Gratuities (APR 1984) (10 U.S.C. 2207)

(b) The Contractor agrees to comply with any clause that is checked on the following list of Defense FAR Supplement clauses which, if checked, is included in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items or components.

— 252.205-7000 Provision of Information to Cooperative Agreement Holders (DEC 1991) (10 U.S.C. 2416).

— 252.219-7003 Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (DoD Contracts) (APR 1996) (15 U.S.C. 637).

— 252.219-7004 Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (Test Program) (JUN 1997) (15 U.S.C. 637 Note).

☒ 252.225-7001 Buy American Act and Balance of Payments Program (APR 2003) (41 U.S.C. 10a-10d, E.O. 10582).

— 252.225-7012 Preference for Certain Domestic Commodities (JUN 2004) (10 U.S.C. 2533a).

— 252.225-7014 Preference for Domestic Specialty Metals (APR 2003) (10 U.S.C. 2533a).

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 13 OF 25

VENDOR:

- 252.225-7015 Restriction on Acquisition of Hand or Measuring Tools (APR 2003) (10 U.S.C. 2533a).
- 252.225-7016 Restriction on Acquisition of Ball and Roller Bearings (MAY 2004) (____ Alternate I) (APR 2003) (10 U.S.C. 2534 and Section 8099 of Pub. L. 104-61) and similar sections in subsequent DoD appropriations acts).
- 252.225-7021 Trade Agreements (JAN 2005) (19 U.S.C. 2501-2518 and 19 U.S.C. 3301 note).
- 252.225-7027 Restriction on Contingent Fees for Foreign Military Sales (APR 2003) (22 U.S.C. 2779).
- 252.225-7028 Exclusionary Policies and Practices of Foreign Governments (APR 2003) (22 U.S.C. 2755).
- 252.225-7036 Buy American Act--Free Trade Agreements--Balance of Payments Program (JAN 2005) (____ Alternate I) (JAN 2005) (41 U.S.C. 10a-10d and 19 U.S.C. 3301 note).
- 252.225-7038 Restriction on Acquisition of Air Circuit Breakers (APR 2003) (10 U.S.C. 2534(a)(3)).
- 252.226-7001 Utilization of Indian Organizations, Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns (SEP 2004) (Section 8021 of Pub. L. 107-248 and similar sections in subsequent DoD appropriations acts).
- ✓ 252.227-7015 Technical Data--Commercial Items (NOV 1995) (10 U.S.C. 2320).
- ✓ 252.227-7037 Validation of Restrictive Markings on Technical Data (SEP 1999) (10 U.S.C. 2321).
- 252.232-7003 Electronic Submission of Payment Requests (JAN 2004) (10 U.S.C. 2227).
- 252.243-7002 Requests for Equitable Adjustment (MAR 1998) (10 U.S.C. 2410).
- ✓ 252.247-7023 Transportation of Supplies by Sea (MAY 2002) (____ Alternate I) (MAR 2000) (____ Alternate II) (MAR 2000) (Alternate III) (MAY 2002) (10 U.S.C. 2631).
- 252.247-7024 Notification of Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631).

(c) In addition to the clauses listed in paragraph (e) of the Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items clause of this contract (FAR 52.212-5), the Contractor shall include the terms of the following clauses, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

- 252.225-7014 Preference for Domestic Specialty Metals, Alternate I (APR 2003) (10 U.S.C. 2533a).
- 252.247-7023 Transportation of Supplies by Sea (MAY 2002) (10 U.S.C. 2631)
- 252.247-7024 Notification of Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631).

52.212-1 INSTRUCTIONS TO OFFERORS--COMMERCIAL ITEMS (JAN 2005)

(a) North American Industry Classification System (NAICS) code and small business size standard. The NAICS code and small business size standard for this acquisition appear in Block 10 of the solicitation cover sheet (SF 1449). However, the small business size standard for a concern which submits an offer in its own name, but which proposes to furnish an item which it did not itself manufacture, is 500 employees.

(b) Submission of offers. Submit signed and dated offers to the office specified in this solicitation at or before the exact time specified in this solicitation. Offers may be submitted on the SF 1449, letterhead stationery, or as otherwise specified

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 14 OF 25

VENDOR:

in the solicitation. As a minimum, offers must show--

(1) The solicitation number;
(2) The time specified in the solicitation for receipt of offers;

(3) The name, address, and telephone number of the offeror;

(4) A technical description of the items being offered in sufficient detail to evaluate compliance with the requirements in the solicitation. This may include product literature, or other documents, if necessary;

(5) Terms of any express warranty;

(6) Price and any discount terms;

(7) "Remit to" address, if different than mailing address;

(8) A completed copy of the representations and certifications at FAR 52.212-3 (see FAR 52.212-3(j) for those representations and certifications that the offeror shall complete electronically);

(9) Acknowledgment of Solicitation Amendments;

(10) Past performance information, when included as an evaluation factor, to include recent and relevant contracts for the same or similar items and other references (including contract numbers, points of contact with telephone numbers and other relevant information); and

(11) If the offer is not submitted on the SF 1449, include a statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation. Offers that fail to furnish required representations or information, or reject the terms and conditions of the solicitation may be excluded from consideration.

(c) Period for acceptance of offers. The offeror agrees to hold the prices in its offer firm for 30 calendar days from the date specified for receipt of offers, unless another time period is specified in an addendum to the solicitation.

(d) Product samples. When required by the solicitation, product samples shall be submitted at or prior to the time specified for receipt of offers. Unless otherwise specified in this solicitation, these samples shall be submitted at no expense to the Government, and returned at the sender's request and expense, unless they are destroyed during preaward testing.

(e) Multiple offers. Offerors are encouraged to submit multiple offers presenting alternative terms and conditions or commercial items for satisfying the requirements of this solicitation. Each offer submitted will be evaluated separately.

(f) Late submissions, modifications, revisions, and withdrawals of offers. (1) Offerors are responsible for submitting offers, and any modifications, revisions, or withdrawals, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that offers or revisions are due.

(2)(i) Any offer, modification, revision, or withdrawal of an offer received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--

(A) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 15 OF 25

VENDOR:

at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of offers; or

(B) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(C) If this solicitation is a request for proposals, it was the only proposal received.

(ii) However, a late modification of an otherwise successful offer, that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(3) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the offer wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(4) If an emergency or unanticipated event interrupts normal Government processes so that offers cannot be received at the Government office designated for receipt of offers by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation or other notice of an extension of the closing date, the time specified for receipt of offers will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(5) Offers may be withdrawn by written notice received at any time before the exact time set for receipt of offers. Oral offers in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile offers, offers may be withdrawn via facsimile received at any time before the exact time set for receipt of offers, subject to the conditions specified in the solicitation concerning facsimile offers. An offer may be withdrawn in person by an offeror or its authorized representative if, before the exact time set for receipt of offers, the identity of the person requesting withdrawal is established and the person signs a receipt for the offer.

(g) Contract award (not applicable to Invitation for Bids). The Government intends to evaluate offers and award a contract without discussions with offerors. Therefore, the offeror's initial offer should contain the offeror's best terms from a price and technical standpoint. However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary. The Government may reject any or all offers if such action is in the public interest; accept other than the lowest offer; and waive informalities and minor irregularities in offers received.

(h) Multiple awards. The Government may accept any item or group of items of an offer, unless the offeror qualifies the offer by specific limitations. Unless otherwise provided in the Schedule, offers may not be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit prices offered, unless the offeror specifies otherwise in the offer.

(i) Availability of requirements documents cited in the solicitation. (1)(i) The GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, and copies of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained for a fee by submitting a request to--

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 16 OF 25

VENDOR:

GSA Federal Supply Service Specifications Section
Suite 8100
470 East L'Enfant Plaza, SW
Washington, DC 20407

Telephone (202) 619-8925
Facsimile (202) 619-8978.

(ii) If the General Services Administration, Department of Agriculture, or Department of Veterans Affairs issued this solicitation, a single copy of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained free of charge by submitting a request to the addressee in paragraph (i) (1) (i) of this provision. Additional copies will be issued for a fee.

(2) The DoD Index of Specifications and Standards (DoDISS) and documents listed in it may be obtained from the--

Department of Defense Single Stock Point (DoDSSP)
Building 4, Section D
700 Robbins Avenue
Philadelphia, PA 19111-5094

Telephone (215) 697-2667/2179
Facsimile (215) 697-1462.

(i) Automatic distribution may be obtained on a subscription basis.

(ii) Order forms, pricing information, and customer support information may be obtained--

(A) By telephone at (215) 697-2667/2179; or

(B) Through the DoDSSP Internet site at
<http://dodssp.daps.mil>.

(3) Nongovernment (voluntary) standards must be obtained from the organization responsible for their preparation, publication, or maintenance.

(j) Data Universal Numbering System (DUNS) Number. (Applies to all offers exceeding \$25,000, and offers of \$25,000 or less if the solicitation requires the Contractor to be registered in the Central Contractor Registration (CCR) database. The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS +4" followed by the DUNS or DUNS +4 number that identifies the offeror's name and address. The DUNS +4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see FAR Subpart 32.11) for the same parent concern. If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. An offeror within the United States may contact Dun and Bradstreet by calling 1-866-705-5711 or via the internet at <http://www.dnb.com>. An offeror located outside the United States must contact the local Dun and Bradstreet office for a DUNS number.

(k) Central Contractor Registration. Unless exempted by an addendum to this solicitation, by submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance and through final payment of any contract resulting from this solicitation. If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 17 OF 25

VENDOR:

next otherwise successful registered Offeror. Offerors may obtain information on registration and annual confirmation requirements via the Internet at <http://www.ccr.gov> or by calling 1-888-227-2423 or 269-961-5757.

(1) Debriefing. If a post-award debriefing is given to requesting offerors, the Government shall disclose the following information, if applicable:

(1) The agency's evaluation of the significant weak or deficient factors in the debriefed offeror's offer.

(2) The overall evaluated cost or price and technical rating of the successful and the debriefed offeror and past performance information on the debriefed offeror.

(3) The overall ranking of all offerors, when any ranking was developed by the agency during source selection.

(4) A summary of the rationale for award;

(5) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.

(6) Reasonable responses to relevant questions posed by the debriefed offeror as to whether source-selection procedures set forth in the solicitation, applicable regulations, and other applicable authorities were followed by the agency.

52.212-3 OFFEROR REPRESENTATIONS AND CERTIFICATIONS-COMMERCIAL ITEMS (JAN 2005)--ALTERNATE I (APR 2002)

An offeror shall complete only paragraph (j) of this provision if the offeror has completed the annual representations and certifications electronically at <http://orca.bpn.gov>. If an offeror has not completed the annual representations and certifications electronically at the ORCA website, the offeror shall complete only paragraphs (b) through (i) of this provision.

(a) Definitions. As used in this provision:

"Emerging small business" means a small business concern whose size is no greater than 50 percent of the numerical size standard for the NAICS code designated.

"Forced or indentured child labor" means all work or service--

(1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or

(2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process or penalties.

"Service-disabled veteran-owned small business concern"--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service--disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and size standards in this

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 18 OF 25

VENDOR:

solicitation.

"Veteran-owned small business concern" means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern--

(1) That is at least 51 percent owned by one or more women; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

"Women-owned business concern" means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Taxpayer Identification Number (TIN) (26 U.S.C. 6109, 31 U.S.C. 7701). (Not applicable if the offeror is required to provide this information to a central contractor registration database to be eligible for award.)

(1) All offerors must submit the information required in paragraphs (b)(3) through (b)(5) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the Internal Revenue Service (IRS).

(2) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(3) Taxpayer Identification Number (TIN).

☐ TIN: _____.

☐ TIN has been applied for.

☐ TIN is not required because:

☐ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

☐ Offeror is an agency or instrumentality of a foreign government;

☐ Offeror is an agency or instrumentality of the Federal Government.

(4) Type of organization.

☐ Sole proprietorship;

☐ Partnership;

☐ Corporate entity (not tax-exempt);

☐ Corporate entity (tax-exempt);

☐ Government entity (Federal, State, or local);

☐ Foreign government;

☐ International organization per 26 CFR 1.6049-4;

☐ Other _____.

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 19 OF 25

VENDOR:

(5) Common parent.

☐ Offeror is not owned or controlled by a common parent;

☐ Name and TIN of common parent:

Name _____.

TIN _____.

(c) Offerors must complete the following representations when the resulting contract will be performed in the United States or its outlying areas. Check all that apply.

(1) Small business concern. The offeror represents as part of its offer that it ☐ is, ☐ is not a small business concern.

(2) Veteran-owned small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents as part of its offer that it ☐ is, ☐ is not a veteran-owned small business concern.

(3) Service-disabled veteran-owned small business concern. [Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2) of this provision.] The offeror represents as part of its offer that it ☐ is, ☐ is not a service-disabled veteran-owned small business concern.

(4) Small disadvantaged business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents, for general statistical purposes, that it ☐ is, ☐ is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) Women-owned small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it ☐ is, ☐ is not a women-owned small business concern. Note: Complete paragraphs (c)(6) and (c)(7) only if this solicitation is expected to exceed the simplified acquisition threshold.

(6) Women-owned business concern (other than small business concern). [Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it ☐ is a women-owned business concern.

(7) Tie bid priority for labor surplus area concerns. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price:

(8) Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program. [Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.]

(i) (Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the four designated industry groups (DIGs).) The offeror represents as part of its offer that it ☐ is, ☐ is not an emerging small business.

(ii) (Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or four designated industry groups (DIGs).) Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 20 OF 25

VENDOR:

in the solicitation is expressed in terms of number of employees); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts).

(Check one of the following):

Number of Employees	Average Annual Gross Revenues
<input type="checkbox"/> 50 or fewer	<input type="checkbox"/> \$1 million or less
<input type="checkbox"/> 51--100	<input type="checkbox"/> \$1,000,001--\$2 million
<input type="checkbox"/> 101--250	<input type="checkbox"/> \$2,000,001--\$3.5 million
<input type="checkbox"/> 251--500	<input type="checkbox"/> \$3,500,001--\$5 million
<input type="checkbox"/> 501--750	<input type="checkbox"/> \$5,000,001--\$10 million
<input type="checkbox"/> 751--1,000	<input type="checkbox"/> \$10,000,001--\$17 million
<input type="checkbox"/> Over 1,000	<input type="checkbox"/> Over \$17 million

(9) (Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns, or FAR 52.219-25, Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.)

(i) General. The offeror represents that either--

(A) It ☐ is, ☐ is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net), and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); or

(B) It ☐ has, ☐ has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) ☐ Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns. The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(9)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. [The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: _____.]

(10) HUBZone small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents, as part of its offer, that--

(i) It ☐ is, ☐ is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 21 OF 25

VENDOR:

percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

(ii) It ☐ is, ☐ is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (c)(10)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. [The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: _____.] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(11) (Complete if the offeror has represented itself as disadvantaged in paragraph (c)(4) or (c)(9) of this provision.) The offeror shall check the category in which its ownership falls:

_____ Black American.

_____ Hispanic American.

_____ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

_____ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory or the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

_____ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

_____ Individual/concern, other than one of the preceding.

(11) HUBZone small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents as part of its offer that-

(i) It ☐ is, ☐ is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns Maintained by the Small Business Administration, and no material change in ownership and control, principal place of ownership, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

(ii) It ☐ is, ☐ is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (c)(11)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating on the joint venture. [The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: _____.] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(d) Representations required to implement provisions of Executive Order 11246--

(1) Previous contracts and compliance. The offeror represents that--

(i) It ☐ has, ☐ has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation; and

(ii) It ☐ has, ☐ has not filed all required compliance reports.

(2) Affirmative Action Compliance. The offeror represents

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 22 OF 25

VENDOR:

that--

(i) It [] has developed and has on file, [] has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR parts 60-1 and 60-2), or

(ii) It [] has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) Certification Regarding Payments to Influence Federal Transactions (31 U.S.C. 1352). (Applies only if the contract is expected to exceed \$100,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract.

(f) Buy American Act Certificate. (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act--Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products. The terms "component," "domestic end product," "end product," "foreign end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act--Supplies."

(2) Foreign End Products:

Line Item No	Country of Origin
_____	_____
_____	_____
_____	_____

(List as necessary)

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)(1) Buy American Act--Free Trade Agreements--Israeli Trade Act Program Certificate. (Applies only if the clause at FAR 52.225-3, Buy American Act--Free Trade Agreements--Israeli Trade Act, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The terms "component," "domestic end product," "end product," "foreign end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act--Free Trade Agreements--Israeli Trade Act."

(ii) The offeror certifies that the following supplies are end products of Australia, Canada, Chile, Mexico, or Singapore, or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act--Free Trade Agreements--Israeli Trade Act":

End Products of Australia, Canada, Chile, Mexico, or Singapore or Israeli End Products:

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 23 OF 25

VENDOR:

Line Item No	Country of Origin
_____	_____
_____	_____
_____	_____

(List as necessary)

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) of this provision) as defined in the clause of this solicitation entitled "Buy American Act--Free Trade Agreements--Israeli Trade Act." The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

Other Foreign End Products:

Line Item No	Country of Origin
_____	_____
_____	_____
_____	_____

(List as necessary)

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) Buy American Act--Free Trade Agreements--Israeli Trade Act Certificate, Alternate I (Jan 2004). If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled "Buy American Act--Free Trade Agreements--Israeli Trade Act":

Canadian End Products:

Line Item No.

(List as necessary)

(3) Buy American Act--Free Trade Agreements--Israeli Trade Act Certificate, Alternate II (Jan 2004). If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act--Free Trade Agreements--Israeli Trade Act":

Canadian or Israeli End Products:

Line Item No	Country of Origin
_____	_____
_____	_____
_____	_____

(List as necessary)

(4) Trade Agreements Certificate. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 24 OF 25

VENDOR:

(i) The offeror certifies that each end product, except those listed in paragraph (g)(4)(ii) of this provision, is a U.S.-made or designated country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(ii) The offeror shall list as other end products those end products that are not U.S.-made or designated country end products.

Other End Products:

Line Item No	Country of Origin
_____	_____
_____	_____
_____	_____

(List as necessary)

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items covered by the WTO GPA, the Government will evaluate offers of U.S.-made or designated country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made or designated country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12549). (Applies only if the contract value is expected to exceed the simplified acquisition threshold.) The offeror certifies, to the best of its knowledge and belief, that the offeror and/or any of its principals--

(1) ☐ Are, ☐ are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(2) ☐ Have, ☐ have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(3) ☐ Are, ☐ are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses.

(i) Certification Regarding Knowledge of Child Labor for Listed End Products (Executive Order 13126). [The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at 22.1503(b).]

(1) Listed end products.

Listed End Product

Listed Countries of Origin

(2) Certification. [If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1)

CONTINUATION SHEET

DOC. NO. N65540-05-Q-0139

PAGE NO. 25 OF 25

VENDOR:

of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.]

[] (i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

[] (ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(j)(1) Annual Representations and Certifications. Any changes provided by the offeror in paragraph (j) of this provision do not automatically change the representations and certifications posted on the Online Representations and Certifications Application (ORCA) website.

(2) The offeror has completed the annual representations and certifications electronically via the ORCA website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of this offer that the representations and certifications currently posted electronically at FAR 52.212-3, Offeror Representations and Certifications--Commercial Items, have been entered or updated in the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201), except for paragraphs

[Offeror to identify the applicable paragraphs at (b) through (i) of this provision that the offeror has completed for the purposes of this solicitation only, if any.]

These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.]

(End of provision)

SPECIFICATION NUMBER: TS050-25

DATE: 26 January 2005

N65540-05-Q-0139

Purchase Specification
For
PMM-to-AIM Coupling Bolt Systems

Table Of Contents

1.0	Introduction	2
2.0	Scope	2
3.0	Applicable Documents.....	4
4.0	Technical Requirements.....	4
5.0	Technical Data.....	7
6.0	Inspection and Testing	8
7.0	Shipping.....	9

1.0 Introduction

This specification establishes the requirements to furnish and install the IPS Coupling Bolt Systems within Building 77H at the Naval Surface Warfare Center Carderock Division (NSWCCD), Philadelphia, PA. The package consists of the manufacture and delivery of coupling bolt hardware and spares, in-place machining, bolt fit-up services, installation of bolted joints, and pre-load services on each coupling end adapter bolt system.

The coupling bolt systems will be used to connect the drive end of a flexible coupling to a prime mover and the driven end of the flexible coupling to a driven component.

2.0 Scope

2.1 Equipment and Services to be provided by the Contractor:

2.1.1 The coupling bolt systems shall be hydraulically fitted assemblies suitable for an industrial installation, meaning that they shall be the manufacturer's heavy-duty offering. These systems shall be capable of continuous duty under the conditions set forth in this specification. The coupling bolt systems shall be constructed in accordance with the best commercial practices and industry standards that exist for the manufacturing of this product. The Contractor shall be responsible for delivery of the following items to NSWCCD, Philadelphia, PA and installation of the bolt system on the machinery site between late-May and Mid-June 2005:

Item	Qty	Description
0001	12	Hydraulically fitted coupling bolt systems for the drive end adapter interface
0002	2	Spares for the drive end adapter interface
0003	12	Hydraulically fitted coupling bolt systems for the driven end adapter interface
0004	2	Spares for the driven end adapter interface
0005	1 lot	Special tools and materials required for the coupling bolt system installation, removal, and maintenance
0006	1 lot	Field installation services to install the bolt systems
0007	1 Lot	Technical Data

2.1.2 The Contractor shall provide on-site services to conduct in-place machining, installation and pre-load of the coupling bolt systems. The completion of the on-site machining and installation services

shall be completed within a period of 7 to 8 days as scheduled in coordination with NSWCCD.

- 2.1.3 The Contractor shall be responsible for precision measurements of the finish-ground expansion sleeves and line-bored coupling bolt holes to provide the consistent accuracy in geometrical shape and dimensional tolerances required for installation of the hydraulically fitted bolted assemblies.
 - 2.1.4 The Contractor shall provide all necessary portable machines, tools and materials for in-place machining, including mounting fixtures and adapters for line-boring the coupling bolt holes on each end of the coupling flange adapter interface.
 - 2.1.5 If necessary, the Contractor shall provide all machinery (i.e., a full size lathe, a grinder, etc.) required for the on-site machining to fit the oversized expansion sleeves into the line-bored finished coupling bores for each end-bolted interface coupling flange.
 - 2.1.6 The Contractor shall be responsible for the calibration of any line-boring equipment and any measuring tools or pressure gauges required for accuracy in dimensional checks or for mounting/re-positioning of any support fixtures.
 - 2.1.7 The Contractor shall be responsible for the accuracy in finish machining the coupling flange holes, the expansion sleeves, and proper match marking for every individual coupling flange bolthole location.
 - 2.1.8 The Contractor shall be responsible to determine if spot face machining is required for each coupling flange bore.
 - 2.1.9 The Contractor shall be responsible for on-site machining of the mandrels for the expansion sleeves as supplied by the factory.
 - 2.1.10 The Contractor shall be responsible for establishing a full body contact length for each bolted assembly prior to bolt installation and pre-load.
 - 2.1.11 The Contractor shall be responsible for proper mounting and pre-load of the bolted assemblies on each coupling end flange interface.
 - 2.1.12 Nothing in this specification shall relieve the Contractor of the responsibility to insure that the design, material, and workmanship are satisfactory for the service intended, or as may be required by common usage and/or good practice.
- 2.2 Equipment and Services to be Provided by the Government
- 2.2.1 The Government will provide a work area within the Building 77H test facility for the Contractor's tools and equipment during installation.

- 2.2.2 The Government will provide power for the Contractor's electric and pneumatic tools and equipment during installation.
- 2.2.3 The Government will provide any lifting equipment needed to unload and mount the Contractor's tools and equipment during on-site machining and installation of the bolt systems.
- 2.2.4 The Government will provide the temporary clamping bolts/studs for retaining mating flanges tightened during in-place machining and for bolt systems installation.
- 2.2.5 The Government will be responsible for shaft rotation when required by the Contractor during in-place machining and for installation of the bolted joints on each coupling end flange adapters.

3.0 Applicable Documents

- 3.1 The design of the items identified in this specification shall be in strict compliance with all applicable sections of recognized standards for the design and manufacturing of coupling bolt systems.

4.0 Technical Requirements

- 4.1 The coupling bolt systems shall be an existing, standard design, or a modified version of an existing standard design that has been successfully used for similar service requirements at other installations.
- 4.2 The coupling bolt systems shall be suitable for continuous operation under full load torque in ahead and astern direction of rotation.
- 4.3 System Load
 - 4.3.1 A flexible coupling is bolted to the drive end of a prime mover and to the driven end of a component. The coupling is installed with the cold axial stretch and a corresponding axial thrust load, to be identified jointly by both the vendor and NSWCCD-SSSES, will be applied to each coupling end bolted interface.
 - 4.3.2 The total static weight of the coupling, including torsion meter and spacer, is approximately 11,090 pounds.
 - 4.3.3 The full load torque transmitted is 24,300,000 inch-pounds at 127 revolutions per minute.
 - 4.3.4 The maximum overload torque limit of the calibrated coupling shear section is 30,000,000 inch-pounds. The bolt system installed on each coupling end flange interface must capable to withstand this overload torque as noted below.
 - 4.3.5 Each bolted interface must be capable of supporting the normal continuous operation of the equipment as well as withstanding the system overload condition as noted in paragraph 4.3.4 above.

- 4.3.6 A safety margin of at least 1.5 on torque capacity shall be provided for resisting maximum overload torque limit without yielding within the bolt assembly and regardless of design and type bolted joints selected for each coupling end flange interface.
- 4.3.7 The minimum surface hardness on the drive end coupling flange (back-face side) is 190 BHN and the load end coupling flange (back-face side) is 200 BHN.
- 4.4 Interface Design
 - 4.4.1 The coupling mounting configuration (conceptual design) and dimensional sketches for each coupling flange interface are shown in Figures 1 and 2.
 - 4.4.2 The space envelope available for in-place machining and bolt assemblies installation (see Figure 1) shall be considered critical for the mounting and re-positioning of line-boring fixture and equipment during on-site machining process and for the installation and removal of bolted assemblies without interferences or obstructions.
 - 4.4.3 The overall length of each bolted assembly should be suitable for easy installation and pre-load for each bolted joint and within the space envelope available at each coupling end.
 - 4.4.4 The final assembly should provide sufficient clearances for periodic inspection and maintenance of the coupling and bolted joints at each fastened interface.
 - 4.4.5 There are three mating flanges to be fastened on the driving end and two mating flanges to be fastened on the driven end of the coupling. A spigot design and recess bore is provided for each mating interface to maintain proper concentricity of the bolted flanges during in-place machining and installation of the bolt assemblies on each end of the coupling.
- 4.5 A total of 24 bolted joints are required for the coupling installation plus 4 spare oversized expansion sleeves and 4 spare piston rings.
- 4.6 The bolting hardware shall be supplied in two (2) lots of different size bolt assemblies and their spares per each lot as follows:
 - Lot No.1: The Drive End Bolt System shall consist of twelve (12) bolt assemblies plus two (2) oversized expansion sleeves as spares and two (2) piston rings as spares. There are three (3) mating flanges (motor flange, spacer, coupling adaptor flange) on the driving end of the coupling that will be furnished with twelve (12) pre-machined bolt holes of 2.750 inches in diameter (nominal) equally spaced on a 32.318 inch bolt circle diameter. During in-place machining, the finish machined diameter of these through holes will be adjusted to a final size and dimensional tolerances as required by the Contractor. The final size of coupling boltholes shall be determined by Contractor based on the design criteria

as outlined in this specification and stress analysis performed by the Contractor in selecting bolt system for the Drive End bolting interface.

Lot No.2: The Driven End Bolt System shall consist of (12) twelve bolt assemblies, (2) two oversized expansion sleeves (spares) and (2) two piston rings (spares). There are (2) two mating flanges on the driven end of coupling that will be furnished with a (12) twelve pre-machined bolt holes of 3.375 inches in diameter (nom.) equally spaced on 38.000 inches bolt circle diameter. During in-place machining the finish machined diameter of these through holes will be adjusted to a final size and dimensional tolerances as required by the Contractor. The final size of the coupling boltholes shall be determined by Contractor based on the design criteria as outlined in this specification and stress analysis performed by the Contractor in selecting bolt system for the Drive End bolting interface

- 4.7 The bolt systems shall be designed for the safe and reliable torque transmission by means of shear or friction torque capacity bolted joints, or by using a combination of shear and friction type bolted assemblies.
- 4.8 The number of shear torque capacity bolted joints recommended by the Contractor shall be reviewed and approved by the Government.
- 4.9 Each bolt system installed on the coupling mounting flange interface shall be capable to withstand the overload torque as specified herein without yielding or failures of the bolted assemblies.
- 4.10 The materials selected for each coupling end bolt system shall be per Contractor's discretion but must be reviewed and approved by the Government.
- 4.11 Each shear torque capacity bolted assembly shall be installed and removed from the coupling bores with a clearance.
- 4.12 For economy of installation and easy pre-load, each shear torque capacity bolted assembly shall be hydraulically fitted and mechanically retained.
- 4.13 The selection and design of hardened thrust washers (if required) for each bolt system joint installation shall be per Contractor's discretion and must be reviewed and approved by the Government.
- 4.14 Each shear torque capacity bolted assembly shall be designed with an expansion component that during pre-load will be expanded radially inside the thru-bored flange holes. With this action the interface(s) between mating shall be locked with a uniformly developed radial interface fit along the full contact length in the coupling bores.
- 4.15 By construction, this expansion component shall be of a hollow design and cylindrically shaped geometry such as machined solid sleeve or a bushing with an internally tapered bore across the full length. To design an expansion component with a longitudinal split partially or across the full length of expansion component is not allowed for this application.

- 4.16 During in-place machining, the proper match marking of final machined boltholes shall be provided for each mating flange concentrically held by the spigot and axial hold in assembly by temporarily installed clamping bolts or studs. The longitudinal scribe line shall be marked on outside diameter of the assembled flanges across each finish machined bore location.
- 4.17 During each bolt system pre-load with a shear torque capacity bolted joints, the consistency and uniformity in pre-loaded bolted assemblies shall be maintained to assure an even load distribution among the bolted joints on each coupling interface to provide the full torque capacity during operation without coupling slippage.
- 4.18 The pre-load applied for each bolted assembly shall be sufficient to eliminated any gap or play between fitted components that may lead to internal vibration on the coupling flange and/or fretting corrosion in the bolted joint.
- 4.19 When removal is required, each coupling end interface bolt system (including the bolt assemblies with shear torque capacity) shall be fully reusable and shall retain the original full load capacity for the new installation and removal cycle.
- 4.20 The internally taper fitted components such as tapered bolt/stud and an expansion member shall be fully interchangeable for each bolt system bolted assembly.
- 4.21 The number of special tools for each coupling end bolt system shall be a minimum, easy for use and safe for installation, removal and maintenance of the bolt assemblies.
- 4.16 Site Conditions:
 - 4.16.1 Location: Indoor
 - 4.16.2 Ambient Temperature Range: 45°F to 105°F
 - 4.16.3 Relative Humidity Range: 5% to 100%

5.0 Technical Data

- 5.1 In addition to the data provided with the technical proposal, the following items shall be submitted and approved by the Government prior to proceeding with fabrication work. The Government will provide review and approval 14 days after receipt of the data package.
 - 5.1.1 The contractor's Quality Assurance (QA)/Quality Control (QC) plan shall be submitted to the Government with the technical package for evaluation.

- 5.1.2 Three copies of final assembly drawings, section drawings, and parts lists are to be submitted and approved by the Government prior to delivery of the coupling bolts. Any special installation or maintenance instructions required by the Government shall be included on the drawings.
- 5.1.3 Final stress analysis of bolted joints and design criteria used for selection. The following shall be included:
 - 5.1.3.1 The bolt stress analysis shall be performed based on the maximum continuous torque transmitted in ahead and astern operation of the coupling. The combined resultant stress in the bolted joint shall not exceed the allowable design stress of the most loaded member in the bolted joint.
 - 5.1.3.2 The design torque capacity of the bolt system on each coupling end bolted interface must be capable to withstand the maximum transient torque limit of the coupling shear section without yielding in the bolted joint. At least 1.5 safety margin shall be provided for resisting overload torque regardless of the design type of bolted joints selected for each coupling end flange interface. The combined resultant stress in the bolted joint shall not exceed the yield strength of the most loaded member in the bolted joint.
 - 5.1.3.3 The analysis shall be performed based on the maximum compressive stress in the boltholes during normal operation, overload condition and during installation/removal of the bolted joints. Calculated stress in the coupling bores shall not exceed the allowable bearing stress of the flange material.

6.0 Inspection and Testing

- 6.1 If the contractor does not have an acceptable quality assurance plan, the Government reserves the right to perform equipment inspections at the Contractor's facility where such inspections are deemed necessary to assure supplies and services conform to the prescribed requirements.
- 6.2 The Government shall approve the factory test and quality assurance inspections prior to hardware package shipment to the installation site.
- 6.3 The Government reserves the right to perform continuous quality assurance (QA) inspections during on-site machining and installation process. The Contractor shall provide final bore size and expansion component dimensions for each bolthole location during in-place machining process.

- 6.4 At least (4) four QA accuracy checks shall be made for each final bore size and match-fitted expansion component on the coupling Drive End Bolt System. The following measurements shall be included:
 - 6.4.1 At each flange mating interface locations and at corresponded locations of expanded component.
 - 6.4.2 At each end of expansion component and corresponded locations of finish machined bore
- 6.5 At least (3) three QA accuracy checks shall be made for each final bore size and match-fitted expansion component on the coupling Load End Bolt System. The following measurements shall be included:
 - 6.5.1 At each flange mating interface locations and at corresponded locations of expanded component
 - 6.5.2 At each end of expansion component and corresponded locations of finish machined bore
- 6.6 The Government reserves the right to review material certification of the tensile strength and yield strength of the bolt/stud, an expansion component and nut materials from the Contractor's tensile tests on a same coupon produced during the same steel manufacture and heat treatment process as the supplied bolting hardware. The certification shall be provided to the Government prior to starting the on-site installation.

7.0 Shipping

- 7.1 The Government will provide a release for shipping to the Contractor following approval of the final drawings by the Government.
- 7.2 Packaging
 - 7.2.1 Equipment shall be packed for shipping in a manner that will ensure acceptance and safe delivery at destination. Contractor is responsible for damage during shipment.
 - 7.2.2 Each package shall be marked with the Contract Number, Contract Item Number and Purchase Specification Number TS050-25.
- 7.3 Shipping Address: Naval Surface Warfare Center
Carderock Division/Philadelphia Detachment
Receiving Code 3361, Bldg. 542
Attn: Mr. Howard Feinstein, Code 9112
Phone (215) 897-8895

Load End

Load End Mating Flanges:

- (1) Load End Shaft
- (2) Load End Adapter

Drive End

Drive End Mating Flanges:

- (1) Drive End Shaft
- (2) Spacer
- (3) Drive End Adapter (with shims pack)

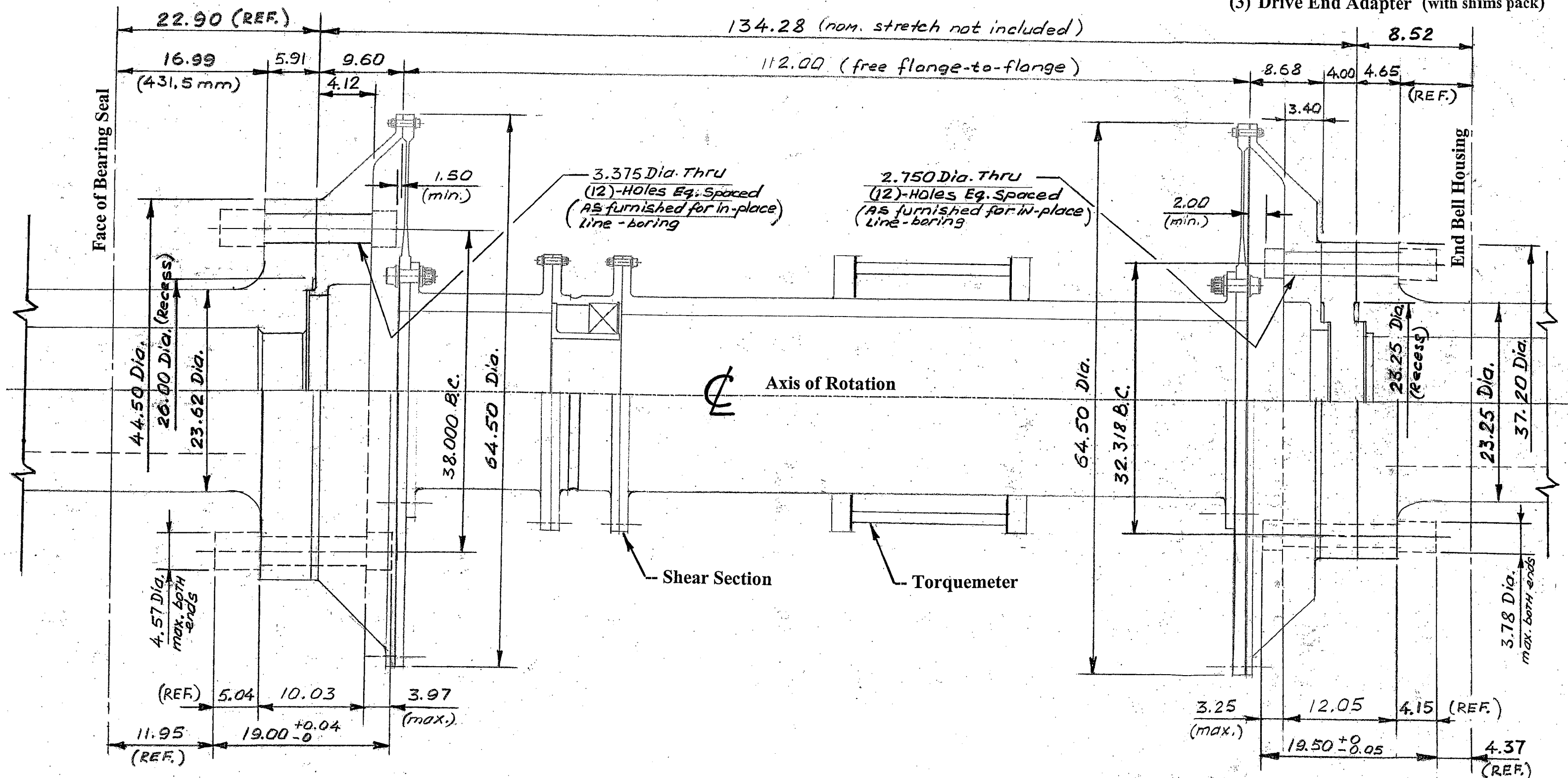
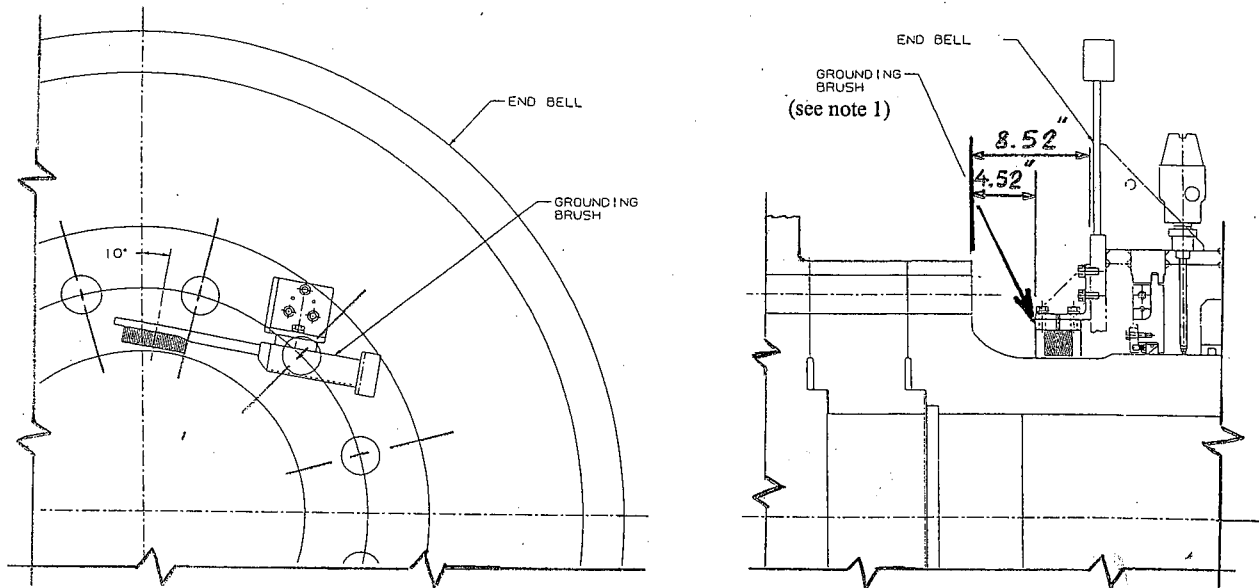


Fig.1 Coupling Installation Arrangement
(Not To Scale)

N65540-05-Q-0139



Drive End Interface

Note: 1. The grounding brush will be removed during on-site in-place machining and installation process.

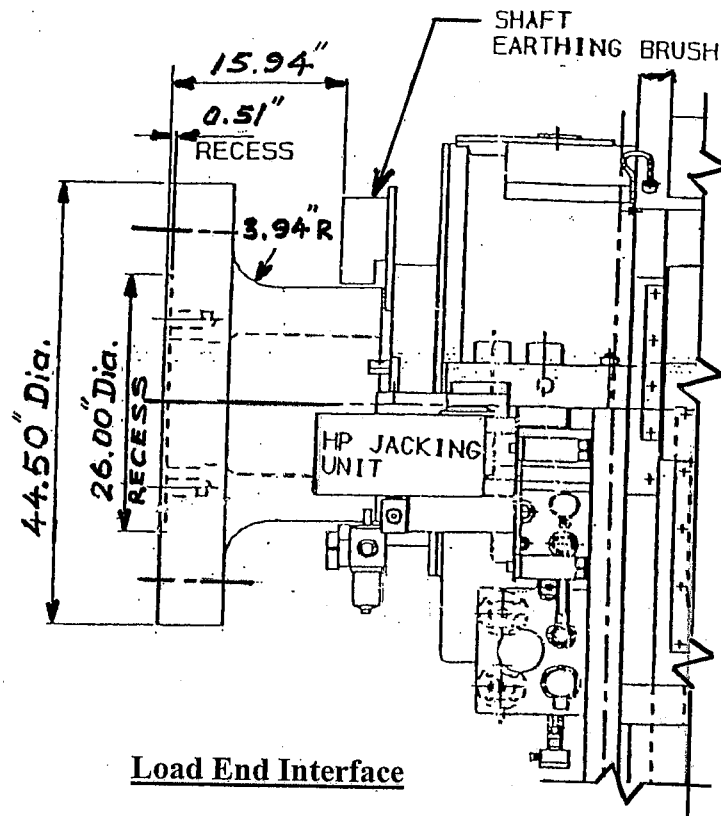


Fig.2 Drive End and Load End Interfaces

(Not To Scale)

N65540-05-Q-0139